

FEB 14 2022

SUNSHINE CONCRETE AND MATERIALS FLORENCE MINE RECLAMATION AND CLOSURE PLAN

**Submitted to the State Mine Inspector's Office
for review and approval in accordance with
ARS Title 27 – Chapter 6
State Mine Inspector Aggregate Mined Land Reclamation**

SUBMITTED:
MARCH 9, 2021
REVISED
JUNE 21, 2021
SEPTEMBER 16, 2021
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FEBRUARY 10, 2022

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A. General Information

Company Sunshine Concrete and Materials
Florence Mine
21803 N. Scottsdale RD Suite 220
Scottsdale, AZ 85255

Contact/Applicant: Enrique Rozas
President

Permit Technical Consultant: David G. Chavez
7G-Compliance LLC
2345 North Vista Del Sol
Mesa, AZ 85207
602.319.7572
dchavez@drakeus.com

Landowner: Sunshine Concrete and Materials
21803 N. Scottsdale RD Suite 220
Scottsdale, AZ 85255

Mine Locations:

Parcel Number:		201-14-0020 (View Tax Info)			
Section:	11	Township:	04S	Range:	10E
Parcel Number:		201-14-0010 (View Tax Info)			
Section:	11	Township:	04S	Range:	10E
Parcel Number:		201-12-001D (View Tax Info)			
Section:	11	Township:	04S	Range:	10E
Parcel Number:		201-15-0020 (View Tax Info)			
Section:	12	Township:	04S	Range:	10E
Parcel Number:		201-15-0050 (View Tax Info)			
Section:	12	Township:	04S	Range:	10E

Copies of this plan need to be submitted to the following: This site is in the town of Florence AZ in Pinal County, Arizona

B. Purpose and Scope

The purpose of this Mine Reclamation and Closure Plan (MRCP) is to present the details of rehabilitation on the Florence Mine site in Pinal County, Arizona concurrent with or after proposed mining operations have ceased in accordance with the Arizona Aggregate Mined Lands Act (AAMLRA) (Arizona Revised Statutes [A.R.S.] § 27-1201, as authorized by A.R.S. § 27-1204. This plan has been developed pursuant to the format and content prescribed in the Arizona Aggregate Mined Lands Reclamation Rules (Arizona Administrative Code {A.A.C}, R 1-3-101, et seq.) to account for all requirements associated with an environmental assessment and the mining operation MRCP submitted to the State Mine Inspector. Consequently, the MRCP addresses environmental, technical, and operational issues that are identified in those documents.

C. Current Ownership and Land Use Included in the Aggregate Mining Unit

The property is owned by Sunshine Concrete and Materials. The current use of the property is cattle grazing. Florence Mine will conduct sand and gravel operations that manufacture materials for the construction industry. This facility is located North of Diversion Dam Road and South of E. Price Road along the Southern boundary of the Gila River. Mining pit is located entirely in the Gila River FEMA Floodway. The approximate area of disturbance as outlined in Figure 1 is approximately 238 acres. A total of approximately 200 acres will be mined over approximately a 20-year period. The extraction and processing operation consist of removing earthen material for aggregate mining as described in A.R.S. § 27-441. Initially the process will be crushing and screening.

Material is stockpiled on the property outside of the FEMA Floodway for onsite use and offsite use and sales. Other activities may include core drilling, the drilling of wells, stripping of overburden, loading, dredging, concrete batch plant, and asphalt batch plant. Water for processing is delivered by well and pit de-water and several locations are set aside for recycling and storage of water. Haul roads within the plant perimeter change often as the mining advances. Parking lots may also change location as needed. Further, stationary equipment may move as mining advances.

It is important to note that since electrical needs change it may be necessary to update current power needs in terms of electrical lines or generator sets and on-site fuel storage may be necessary to accommodate the use of heavy equipment.

Plant offices, a scale house, parts rooms, and storage bunkers may be moved from time to time and additional office area/other construction is possible in the future. Berms, fences, and landscaping will be placed for environmental, safety, and for

visual and sound buffers.

Florence Mine estimates the removal of up to one million tons per year over the next 20-year period.

D. Proposed Post-Aggregate Mining Use

Potential benefits of this project include minimizing future flooding, environmental restoration, water quality enhancement, multi-use facility, educational tool, and an economic engine for area development. Post use of the property will be cattle grazing. Any stockpiles of mined materials to include soils and overburden berms will be removed or used for reclaiming of banks and slopes.

E. Narrative of Roads

There are access roads from the pit to the processing areas and from the entrance to all the offices, labs, staging areas, scale house, warehouse, and repair shops. Haul roads within the plant perimeter may change as the mining advances. Parking lots may also change location as needed.

F. Acreage Effected by Each Type of Surface Disturbance

See Table 1 for Areas of Disturbance

Aggregate Mine Open Pit – Pinal County Floodplain Use Permit will be obtained from the Pinal County Flood Control District.

Roads - Haul roads are located within the plant perimeter to move aggregates as required for processing and transporting offsite. Haul road locations may change often as the mining advances.

Settling Ponds - Onsite settling ponds are located near the processing area to enable the recycling of processwater.

Overburden Impoundments - Overburden is primarily used on the site perimeter to establish berms that provide a safety barrier to keep the public from accessing the property.

Process Facilities - Process facilities include the use of crushers, screens, conveyors; mobile equipment for the support of production and other construction material related operations.

Other - Employee parking lot, Plant Offices, scale house, vehicle maintenance shop, parts rooms, and diesel fuel storage may exist onsite as necessary to conduct aggregate mining and aggregate product production.

G. Reclamation

Proposed Reclamation Measures to Achieve Post Mine Land Use and Public Safety

What measures will restrict public access to pits or other hazardous surface features?

No structures will remain on site; berms or fences will be installed around all open pits as required. Where hazards to public safety cannot be reduced by reclamation, weather resistant signs warning to avoid the areas, may be posted as required. Further, removal of all scrap metal, wood, trash, and other debris that pose a threat to public safety or create a public nuisance will be removed.

What measures will be taken to address erosion control and stability?

Vegetation will provide the needed erosion control and drainage protection for the slopes of the pit as required by the reclamation plan. Roads and other disturbed or compacted areas of the property will be re-vegetated by seeding to control erosion and aid in drainage.

Site specific grading, revegetation, or other proposed control measures shall be conducted, as necessary, to address erosion, no permanent piles of mined material or overburden will be left to restrict drainage.

What measures will be taken to address revegetation, conservation, and the care and monitoring of revegetated areas?

Topsoil Salvage - The term topsoil refers to the uppermost layer of soil, usually 6-12 inches deep, but sometimes deeper. This layer is chemically and biologically active and rich in organic matter, nutrients, seeds, fungi, and microorganisms.

Surface Preparation - In addition to replacing the salvaged topsoil, decompaction of all compacted areas such as roads, processing areas, and equipment storage areas is essential for the seedlings' ability to contact the soil, germinate, penetrate the ground, grow deep roots, and uptake water and nutrients.

Plant Species – The University of Arizona department of environmental studies will be utilized to determine the best type of species to use post mining at this site.

<https://environmentalscience.cals.arizona.edu/research/remediation-reclamation-and-restoration>

Best Planting Methods - Seeding, hydroseeding, planting container plants, and transplanting salvaged plants are all options for revegetating this site.

Proper Planting Time - The optimal planting time is usually during the fall and winter months to take advantage of the natural precipitation pattern, especially not able to irrigate on a large scale. Drought-tolerant native plants will do fine once established.

Maintenance and Monitoring - Track of the progress of revegetation efforts in areas undergoing reclamation, to find out what's working and what's not and undertake remedial measures as soon as possible. This means following an "adaptive management" approach that allows you learn from failures and build on successes.

Weed management - Noxious weeds are a problem and they will quickly invade disturbed soil surfaces. If they aren't managed vigilantly, they can ruin a revegetation project and cost a lot of money to eradicate. Early detection, rapid response, and consistent effort throughout all phases of mining and reclamation are essential steps to keep weeds under control.

Hiring professionals - Involvement of trained professionals such as botanists, restoration ecologists, landscape architects, and seed companies or nurseries familiar with native plants.

The bottom of the open pit is below the current water table and will not be seeded

The final contours and topography will consider current storm water management plans, and which include all-natural drainage channels to maintain flood and erosion control.

Stockpiles of materials that remain after finally mining has been completed will be used for bank stability, filling in potholes, and will be distributed throughout the facility to provide stable ground.

Equipment and Structure Removal

All equipment used for the mining operation (i.e., excavating equipment, crushers, conveyor belts, screens, and fuel storage tank) will be removed from the site. Buildings and structures located on the property (i.e., office, scale house, repair shop, and quality control lab) will be removed when the mining operation concludes. The concrete foundations constructed for process equipment and structures will be

removed at this time and placed in an inert landfill.

Any area that may have been altered during the mining operation, such as areas around the repair shop, will be subject to remediation. For example, since small portions of the property were subject to activities such as vehicle maintenance they will be reclaimed accordingly.

Site Infrastructure

Any roads that were constructed exclusively for mining operations at this site will be removed. This does not include existing roadways, such as haul roads to the pit. All haul roads, plant roads, and access roads will be left graded and in usable condition for the vehicle traffic that may exist in the area. If necessary, roads will be ripped, plowed, scarified, and revegetated as required by Pinal County.

Power lines and water lines that were installed on the property for the mining operation will be removed upon completion of activity. All wells that were installed will be abandoned in accordance with Arizona Department of Water of Resources regulations.

Area Stability

Reclaimed slopes in the open pit will be at a 3:1 ratio that will minimize erosion and result in geotechnical stability for the area. Soil capping and regrading may be necessary to maintain the integrity of specified areas, otherwise no other physical stabilization will be necessary. Slopes will meet the required specifications consistent with the Floodplain Use Permit issued by the Pinal County Flood Control District as applicable.

Soil Conservation

Pursuant to A.R.S. § 27-1274, stockpiles of conserved soil shall be marked with legible signs that identify the stockpile as "SOIL." A soil stockpile will be stabilized, if necessary, to prevent excessive losses from erosion or fugitive dust emissions.

Revegetation

Where surface disturbances result in compaction of the soil, ripping, disking, or other means will be employed in areas to reduce compaction and to establish a

suitable root zone in specified areas in preparation for planting.

Revegetation will be conducted to establish plant species that will support the approved post-aggregate mining land use as identified in Section 2.4.

Note: The establishment of vegetation species, density, or diversity that is different than pre-existing conditions or on adjacent lands will constitute successful reclamation if the following apply.

1. The approved post-aggregate mining land use is different than the pre-aggregate mining land use or the use of adjacent lands.
2. The site-specific nature of the surface disturbance, including soil conditions and topography, is such that the establishment of pre-existing or adjacent conditions is not technically or economically practicable; or

The establishment of different species is preferable for control of erosion.

Timeline

Reclamation as required by the Pinal County Floodplain Use Permit is ongoing. Final reclamation will occur after the mining operation is completed in approximately 20 years. Reclamation of the mining activity shall be designed to minimize hazards to public safety to the extent technically and economically practicable and as required by Pinal County.

H. Mine Closure

In accordance with A.R.S. § 27-1271(B.10) reclamation will commence as the mining plan moves forward. All reclamation will be completed within 2 years after closure of mining operations. On an annual basis the site will be inspected to ensure compliance with the reclamation plan and to perform necessary trash removal, fence repair and erosion control measures.

Reclamation on the processing and related areas will commence immediately upon completion of mining operations. There will be no substantial period between operation and reclamation.

The closure of operations at this site will be monitored in accordance with approved conditions of this plan in accordance with the Arizona State Mine Inspector's Office.

I. Reclamation Costs and Financial Assurance Closure (see figure 4)

All reclamation costs will be wholly born by the applicant to remove structures, stabilize topography, remove stockpiles, or used for banks and/or slopes, re-vegetate, and perform site preparation.

Source of Reclamation Cost Estimates is the Arizona Rock Products Association.
Proposed Reclamation Cost Estimation Summary

Financial surety has been satisfied by a Certificate of Self-Insurance.

See Figure 6 for a copy of the Company's Proof of Financial Assurance Letter and Certificate of Self-Insurance.

J. Reclamation Statement of Responsibility

Sunshine Concrete and Materials assumes responsibility for the reclamation of surface disturbances that are attributable to the aggregate mining unit consistent with A.R.S § 27-1201 and A.C.C. R 1-3-501 pursuant to that chapter. Reclaimed areas that have been disturbed at the site will be reclaimed a safe and stable condition when mine operations conclude.



March 21, 2021

Mr. Joe Hart
Arizona State Mine Inspector
1700 West Washington
Suite 403
Phoenix, Arizona 85007

RE: Reclamation Plan for Florence Mine

Dear Mr. Hart:

I as CEO and President of Sunshine Concrete and Materials hereby submit "Statement of Responsibility" regarding the documents submitted.

Questions or concerns please contact David G. Chavez, email dchavez@drakeus.com or 602.319.7572.

Regards

A handwritten signature in black ink, appearing to read "Enrique Rozas".

Enrique Rozas
CEO and President
Sunshine Concrete and Materials

K. Figures and Tables

Figure 1
Site Boundaries

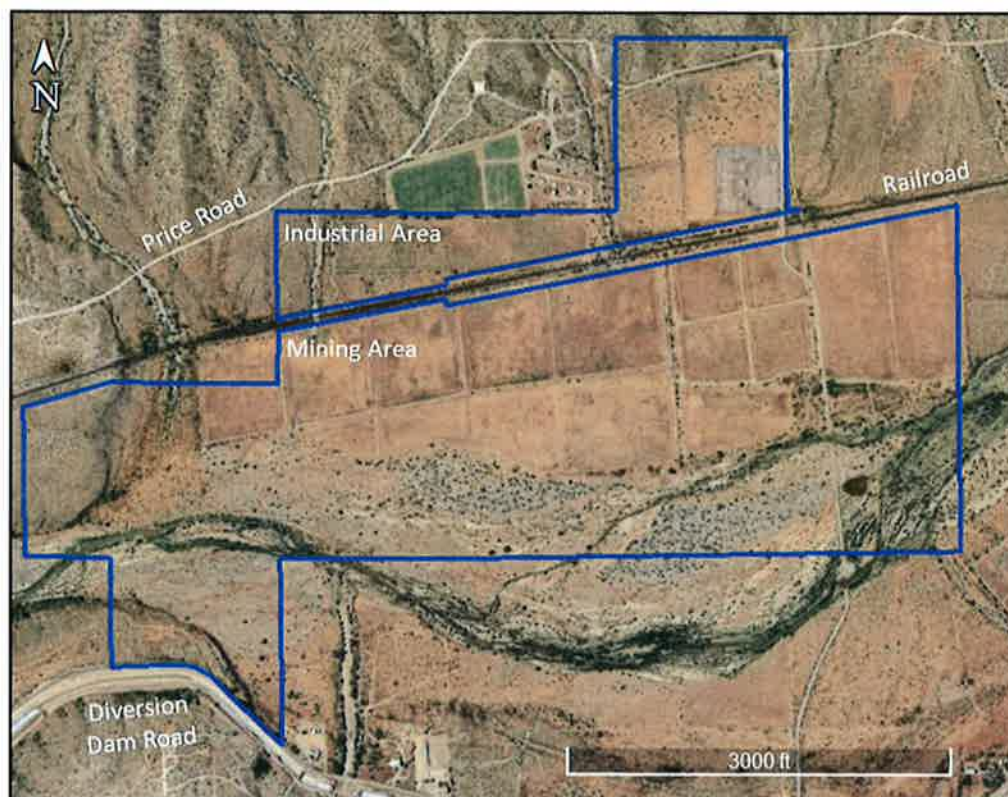


Figure 2
Site Mining Reserves



Section	Sq. yd	Sq. Feet	Acre	Depth	Tons	% Set Back and Waste	
						0.20	Total
A	207,170	1,864,530	43	25	2,675,232	535,046	2,140,186
B	157,164	1,414,476	32	25	2,029,494	405,899	1,623,595
C	1,581,220	14,230,979	327	25	20,418,645	4,083,729	16,334,916
	1,945,554	17,509,985	402	25	25,123,372	5,024,674	20,098,697

Figure 3
Topo Map

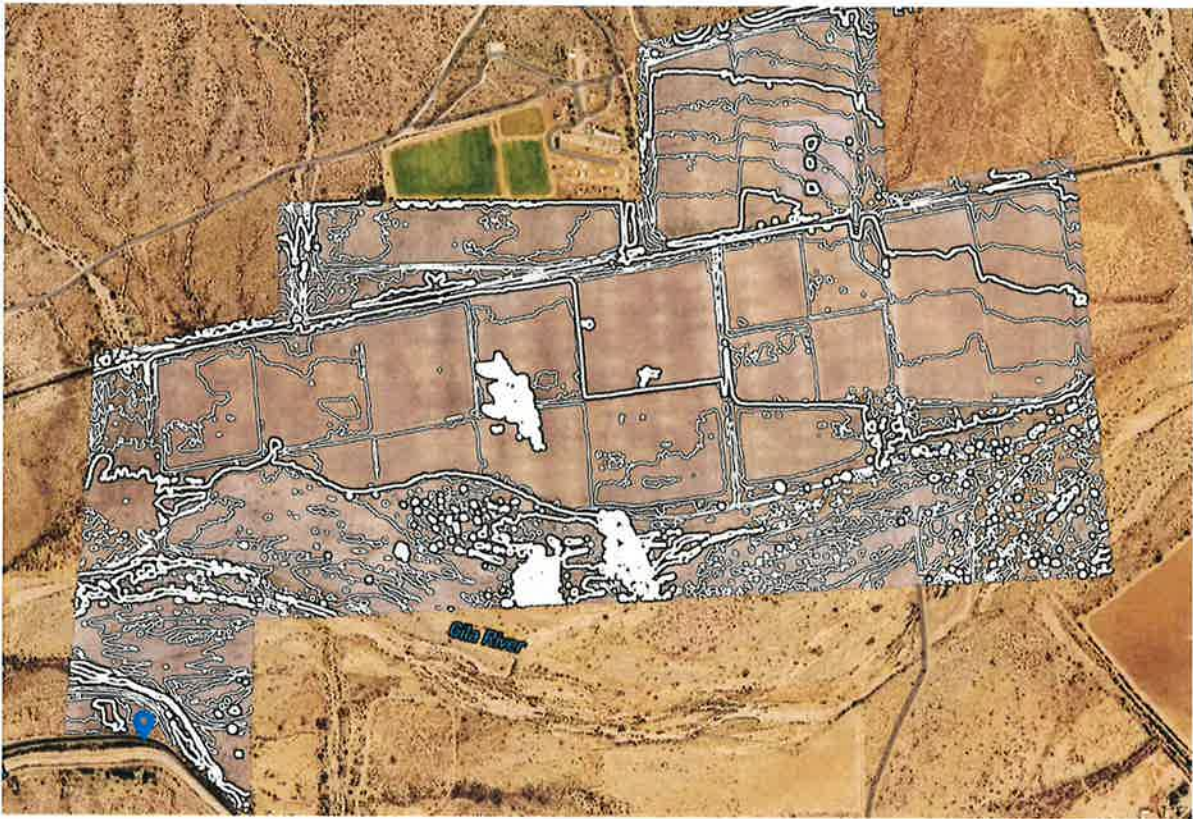


Table 1
Area of Disturbance

Area	Area in Acres
Aggregate Mine	206
Roads	2
Ponds	5
Overburden	10
Process Area	10
Other Disturbance Areas	5

L. Estimated Reclamation Costs

The estimated costs developed for this Reclamation Plan include:

- A. Pit Walls Re-Grading Cost
- B. Demolition and removal of structures, utilities, facilities, and improvements.
- C. Road reclamation.
- D. Care and maintenance.
- E. General construction.
- F. Plant removal
- G. Distribution of stockpiles
- H. Cost adjustment
- I. Administrative costs.

A summary of the estimated reclamation costs is listed in Table 1 at the end of this section.

A. Pit Walls Re-Grading Cost

The pit walls will be mined to a final reclaim slope of 1.5H:1V. There is no cost for this category.

B. Demolition and removal of structures, utilities, facilities, and improvements.

The reclamation activities detailed in this category include:

- Removal of several portable office/control structures.
- Removal of scale house and scale.
- Removal of a quality control lab.
- Removal of a maintenance shop.
- Removal of boneyard equipment.
- Removal of one septic systems.
- Removal of a fueling area with secondary containment.
- Breakup of concrete pads (approximately 18,200 square feet); and
- Removal and disposal of concrete pads, asphalt, and concrete secondary containment (approximately 3,000 cubic yards).
- Dewatering of ponds, removal of excess materials and grading.

The total estimated cost for this category is \$174,754

C. Road Reclamation Cost

There is an estimated 7,300 feet of haul and plant roads that will be reclaimed. The cost of ripping/scarifying the roads is estimated at \$4,760.

D. Care and Maintenance Cost

Care and maintenance for the reclamation effort at this operation consists of:

- An annual inspection of the Site.
- Preparation of the required annual report describing the site conditions; and
- Trash removal.

The cost of care and maintenance is estimated at \$1,535.

E. Construction Cost

Construction efforts for reclamation include installing rip-rap erosion control and security/access signs.

The cost of construction is estimated at \$12,918

F. Plant Removal Cost

The estimated reclamation costs detailed in this section include the dismantling, loading onto transport, and removal of the following equipment:

- One crushing and screening plants.
- One wash plant and water reclaim system.

The cost of plant removal is estimated at \$168,888.

G. Distribution of Stockpiles

Stockpiles of materials that remain after finally mining has been completed will be used for bank stability, filling in potholes, and will be distributed throughout the facility to provide stable ground.

The total estimated cost for this category is \$16,281.

H. Cost Adjustment

Price index factor was included to adjust from 2020 pricing to estimated 2050 pricing on operating and material costs. The index factor supplied is the Consumer Price Index for the period of 2020.

- $CPI = 1.4$

The Consumer Price Index adjustment is not applied to the administrative costs because it is a fixed percentage of the operating and material costs.

The cost adjustment is estimated at \$5,308

I. Administration

The estimated administrative cost includes:

- Contingency.
- Mobilization/demobilization.
- Indirect costs.
- Contractor profit.
- and Contract administrative costs.

The total estimated administrative cost is \$10,000.

ESTIMATED RECLAMATION COST SUMMARY. **
TABLE 1

ITEM	RECLAMATION ITEM	COST
A	Pit Wall Re-grading	\$-
B	Demolition and removal of structures, utilities, facilities, and improvements.	\$174,754
C	Road Reclamation	\$4,760
D	Care and Maintenance	\$1,535
E	Construction	\$12,918
F	Plant Removal	\$168,888
G	Distribution of stockpiles	\$16,281
	Sub Total	\$379,136
H	Cost Adjustment (1.4%)	\$5,308
I	Administration	\$10,000
	Total	\$394,444

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Reclamation costs were reviewed and approved by Rodney George President of Rango LLC.

ESTIMATED RECLAMATION COST SUMMARY.
TABLE 2

B	Demolition and removal of structures, utilities, facilities, and improvements.
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3. Demolition and removal of structures, utilities, facilities, and improvements				
Area	10	Acres		
Average depth	0.5	ft		
Volume	8067	cu. yd.		
Average distance	150	ft		
Equipment	D8T			
Mobilization time (roundtrip)	5	h		
150 ft capacity	600	cu. yd./hr		
Efficiency fator	0.833333333			
Adjusted Production	500	cu. yd./hr		
Dozer Hours	125			
Dozer Months (160h month)	7.00	months		
	Rental			
CAT D8T w/ SU blade	\$ 15,000.00	/month	Price retrieved from rental website (rentalyard.com)	
Taxes, Insurance, Misc.	16%			
D8T Rental Cost	\$ 121,800			
Fuel Cost (@ \$3.75/gal)	\$ 28.90	/h	Based on current price for diesel	
Operator	\$ 26.00	/h	Average Base Salary - Phoenix Metro Area (indeed)	
D8T Operating Costs	\$ 6,588			
Water Truck (4,000 Gal)	\$ 4,997.00	/month		
Taxes, Insurance, Misc.	16%			
Water Truck Rental Cost	\$ 40,576			
Fuel Cost	\$ 20.05	/h		
Operator	\$ 24.20	/h		
Water Truck Operating Costs	\$ 5,310		Salary Median - Phoenix Metro Area (salary.com)	
Low-boy rental (dozer mob.)	\$ 120			
@ 4h	\$ 480			
Total Costs	\$ 174,754			

C	Road Reclamation
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C. Roads

Equipment	CAT 120 H	
Ripping, Scarifying and Grading Speed	3 mph	
Ripper Width	7 ft	
Blade Width	12 ft	
Effective Length (@30 degrees)	10.4 ft	
Ripping Overlap	1 ft	
Grading Overlap	2 ft	
Efficiency Factor	83%	
Ripping Productivity	2.8 acres/h	2 passes
Grading Productivity	2.5 acres/h	3 passes
Area	1.00 acres	
Mobilization	2 h	
Time Ripping	0.70 h	
Time Grading	1.18	
Total Time	4.00	

RENTAL

Equipment	CAT 140H	
Unit Cost (Hourly)	\$ 850.00	Price retrieved from rental website (rentalyard.com)
Taxes, Insurance, Misc.	16%	
Total	\$ 3,944.00	
Low-Boy Rental (4 h)	\$ 650.00	

OPERATING COSTS

Grader Operating Costs (@3.75/gal)	\$ 50.00	
Operator	\$ 33.00	Salary Median - Phoenix Metro Area (salary.com)
Total	\$ 166.00	

TOTAL **\$ 4,760.00**

D	Care and Maintenance
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D. Care and Maintenance Cost

	HOURS	HOUR RATE	TOTAL
Annual Inspection	10	\$ 95.00	\$ 950.00
Reporting	3	\$ 95.00	\$ 285.00
Trash Removal	10	\$ 30.00	\$ 300.00
TOTAL			\$1,535.00

E	Construction		
E. Construction Cost			
Move Overburden Berms			
Length		10000	ft
Volume		31000	cu. yd.
Equipment	CAT 966G		
Bucket (GP)		5	cu. yd.
Travel		50	ft
TT Roundtrip (approximate)		0.2	min
Cycle Time		0.5	min
Total Cycle Time		0.7	min
Efficiency		83%	
N. of Cycles		86	
Production Rate		430	cu. yd./h
Total Hours		72	h
Rental			
CAT 966 Rental	\$	650.00	/week CAT/Wheeler Rental Rate Guide
Total (8 days)	\$	6,890.00	
Taxes, Insurance and Misc.		16%	
Rental Cost	\$	7,992.40	
Low-boy Rental (4 Hours)	\$	750.00	
Operating Costs			
Fuel Cost (@ \$3.75/gal)	\$	32.00	/h
Operator	\$	26.00	/h
Total Operating Costs	\$	4,176.00	
Total Cost	\$	12,918	

F	Plant Removal
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Move Overburden Berms			
Length	10000	ft	
Volume	31000	cu. yd.	
Equipment	Caterpillar Model 325 excavator		
Reach	105	ft.	
Travel	200	ft	
TT Roundtrip (approximate)	0.2	min	
Cycle Time	0.5	min	
Total Cycle Time	0.7	min	
Efficiency	83%		
N. of Cycles	350		
Production Rate	1750	cu. yd./h	
Total Hours	92	h	
Rental			
Caterpillar Model 325 excavator	\$	12,000.00	/week CAT/Wheeler Rental Rate Guide
Total (8 days)	\$	127,200.00	
Taxes, Insurance and Misc.		16%	
Rental Cost	\$	147,552.00	
Low-boy Rental (24 Hours)	\$	16,000.00	
Operating Costs			
Fuel Cost (@ \$3.75/gal)	\$	32.00	/h
Operator	\$	26.00	/h
Total Operating Costs	\$	5,336.00	
Total Cost	\$	168,888	

G	Distribution of stockpiles
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G. Distribution of Stockpiles			
Move Stockpiles			
Length		2500 ft	
Volume		50000 cu. yd.	
Equipment	CAT 966G		
Bucket (GP)		5 cu. yd.	
Travel		50 ft	
TT Roundtrip (approximate)		0.2 min	
Cycle Time		0.5 min	
Total Cycle Time		0.7 min	
Efficiency		83%	
N. of Cycles		86	
Production Rate		430 cu. yd./h	
Total Hours		116 h	
Rental			
CAT 966 Rental	\$	4,630.00 /week	CAT/Wheeler Rental Rate Guide
Total (1 week + 4 days)	\$	8,334.00	
Taxes, Insurance and Misc.		16%	
Rental Cost	\$	9,667	
Low-boy Rental (4 Hours)	\$	616	
Operating Costs			
Fuel Cost (@ \$3.75/gal)	\$	26 /h	
Operator	\$	26 /h	
Total Operating Costs	\$	5,997	
Total Cost	\$	16,281	

Figure 5
Equipment Lists

Crushers
Wash Plant
Conveyor(s)
Excavators
Backhoe
Front End Loader
Dozers
Screen Plants
Water Tanks
Concrete Batch Plants
Asphalt Plants
Pickups

Water Trucks
Graders

Figure 6
Financial Assurance

Not yet Available

Figure 7
Mine/Facility Layout

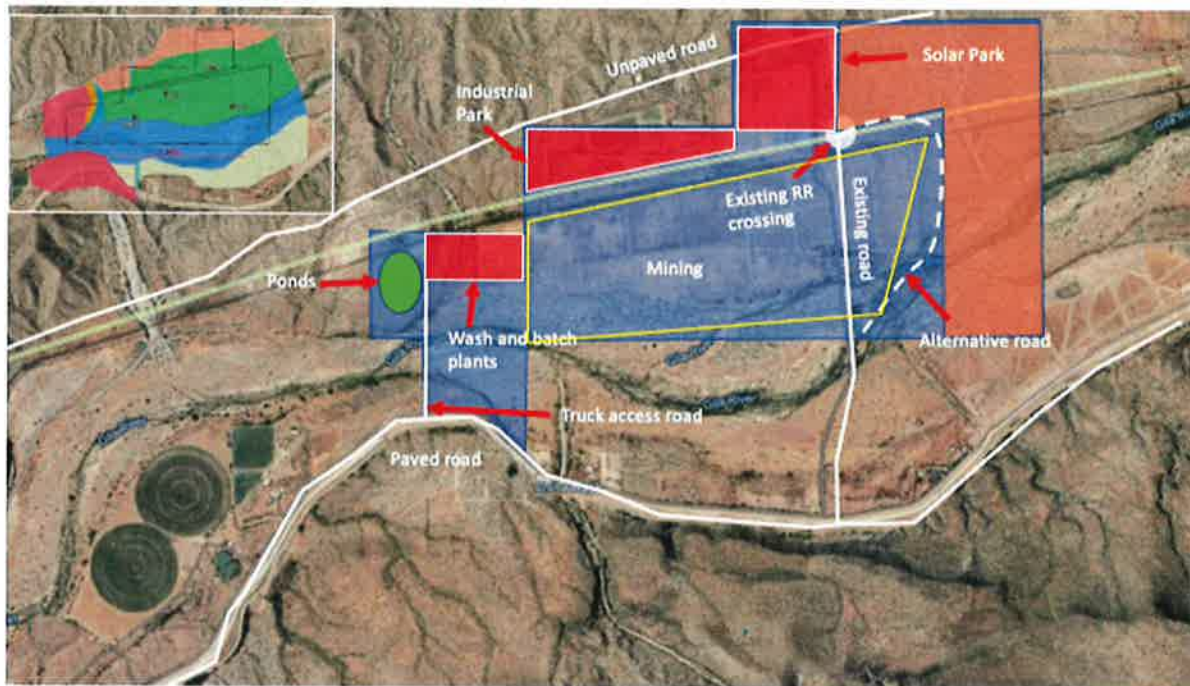


Figure 8
Final Mine Reclamation

